compounds of foumula II correspond to the compounds of structure 3, in Scheme 1, whereas, compounds of formula III correspond to the compounds of structure 2, also shown in Scheme 1. Further, synthesis of compounds of formula III and II are further disclosed in Example 1 of the Specification.

Thus, pending Claims 1-10 are improperly rejected as being non-enabling.

Rejection of Claims 1-2 and 7-10 Under 35 USC 112, Second Paragraph

Claims 1-2 and 7-10 are rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants claim as the invention. Specifically, the Examiner states that the term "selected from" in Claims 1 and 7 is an improper Markusk terminology. The Examiner also states that the term "(4- to 10-membered heterocyclic)C1-C6 alkyl substituted by 4- to 10- membered heterocyclic", in Claim 2, is confusing. Further, the Examiner states that Claim 8 is indefinite in that when R2 is H, the compounds of formula II and FOrmula III are the same.

Claims 1 and 7 are hereby amended, as suggested by the Examiner, to overcome this rejection.

Claim 2 is hereby amended to overcome this rejection by further clarifying the term "(4- to 10-membered heterocyclic)C1-C6 alkyl substituted by 4- to 10- membered heterocyclic" by amending the claim to state that the heterocyclic substituent is further substituted by a 4- to 10- membered heterocyclic. This amendment is supported by Claim 1 wherein it states that the heterocyclic moieties,

of R^2 are optionally substituted by 4- to 10-membered heterocyclic. This substitution is further exemplified by the structure of the compound of Claim 3.

Furthermore, Claim 8 is hereby amended to overcome this rejection by defining the term R^2, as used therein, as not including "H" as one of ordinary skill in the art would clearly understand that a compound of formula III does not require treatment with R^2-L, to form a compound of formula II, wherein R^2 is H, as, in this particular instance, this formula III compound is the same compound as the formula II.

Thus, pending Claims 1-2 and 7-10, as amended, are not properly rejected as being indefinite.

Conclusion

Based on the foregoing, Applicant respectfully submits that the Examiner's rejection of Claims 1-10, as amended, under 35 USC 112, first paragraph, and Claims 1-2 and 7-10, as amended, under 35 USC 112, second paragraph, are not proper. Therefore, Applicant respectfully requests that

the rejections of Claims 1-10 under 35 USC 112, first and second paragraphs, be withdrawn. Applicant further requests that a notice of allowance be issued for pending Claims 1-10.

Respectfully Submitted:

Date: 18 December 2002

Scott Alexander McNeil
Attorney for Applicant
Registration No. 37,185

Pfizer Inc.
Patent Department, Box 519
Eastern Point Road
Groton, Connecticut 06340
(860) 715-0871

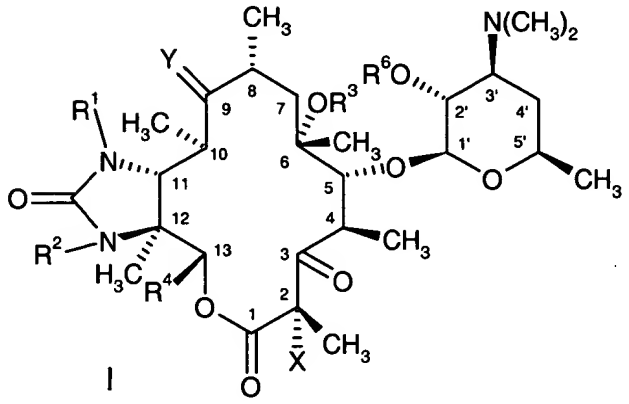
ATTACHMENT TO AMENDMENT

Version with Markings to Show Changes Made

DO NOT ENTER THIS VERSION

CLAIMS

1(once amended). A compound of the formula



I

or a pharmaceutically acceptable salt, prodrug, or solvate thereof, wherein:

X is Cl, Br, I, or F;

Y is =O, or $=NOR^5$; or Y means both -H and $-OR^5$; or both -H and $-NR^5R^{10}$;

R^1, R^2, and R^3 are independently selected from the group consisting of H, C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, (4- to 10-membered heterocyclic) C_2-C_6 alkenyl, (4- to 10-membered heterocyclic) C_2-C_6 alkynyl, (C_6-C_{10} aryl) C_1-C_6 alkyl, (C_6-C_{10} aryl) C_2-C_6 alkenyl, and (C_6-C_{10} aryl) C_2-C_6 alkynyl wherein said alkyl moieties of the foregoing groups are optionally substituted by halo or C_1-C_6 alkyl, and wherein said heterocyclic moieties are optionally substituted by 4- to 10-

membered heterocyclic, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, or (C_6-C_{10} aryl) C_1-C_6 alkyl, and further wherein the aryl and heterocyclic moieties of each of the foregoing groups and optional substituents is optionally substituted by 1 to 4 R^7 groups;

R^4 is selected from the group consisting of H, C_1-C_{10} alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, (C_1-C_6 alkoxy) C_1-C_6 alkyl, (C_1-C_6 alkylthio) C_1-C_6 alkyl, (C_5-C_8 cycloalkyl) C_2-C_5 alpha branched alkyl, C_3-C_8 cycloalkyl, C_5-C_8 cycloalkenyl, 3 to 6 membered O or S containing heterocyclic group, or phenyl, wherein each R^4 group may be substituted with from 1 to 3 substituents independently selected from the group consisting of hydroxy, halo, (C_6-C_{10} aryl) C_2-C_6 alkenyl, and C_1-C_4 alkyl;

R^5 and R^{10} are independently selected from the group consisting of H, C_1-C_6 alkyl, C_6-C_{10} aryl, 4- to 10-membered heterocyclic, (4- to 10-membered heterocyclic) C_1-C_6 alkyl and (C_6-C_{10} aryl) C_1-C_6 alkyl, wherein said aryl and heterocyclic groups are optionally substituted by 1 to 4 R^7 groups;

R^6 is H, -C(O)C_1-C_6 alkyl, benzyl, benzyloxycarbonyl, or (C_1-C_6 alkyl)$_3$ silyl;

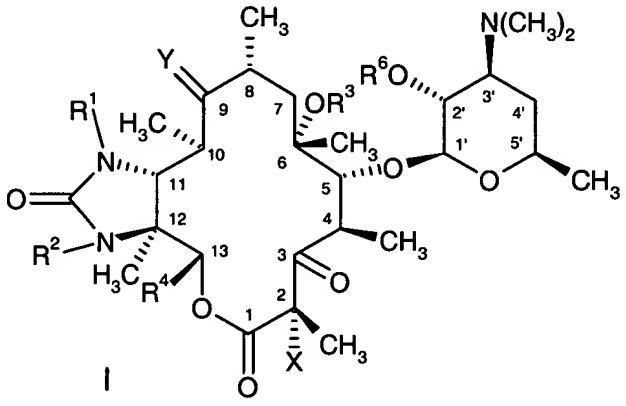
R^7 is independently selected from the group consisting of halo, cyano, nitro, trifluoromethyl, trifluoromethoxy, azido, -C(O)R^8, -C(O)OR^8, -OC(O)R^8, -NR^8C(O)R^9, -C(O)NR^8R^9, -NR^8R^9, hydroxy, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_6-C_{10} aryl, 4- to 10-membered heterocyclic, and C_1-C_6 alkoxy; and

each R^8 and R^9 is independently selected from the group

consisting of H, C_1-C_6 alkyl, C_6-C_{10} aryl, and 4- to 10-membered heterocyclic.

2(once amended). The compound of claim 0 wherein Y is =O or =NOR^5, R^1 is (4- to 10-membered heterocyclic) C_1-C_6 alkyl, wherein the heterocyclic is substituted by 4- to 10-membered heterocyclic, R^2 is C_1-C_{10} alkyl or C_2-C_{10} alkenyl, R^3 is C_1-C_6 alkyl, R^4 is ethyl, R^5 is C_1-C_6 alkyl, and R^6 is H.

7(once amended). A method of preparing a compound of formula I



I

or a pharmaceutically acceptable salt, prodrug, or solvate thereof, wherein:

X is Cl, Br, I, or F;

Y is =O, or =NOR^5; or Y means both -H and -OR^5; or both -H and -NR^{5}R^{10};

R^1, R^2, and R^3 are independently selected from the group consisting of H, C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, (4- to 10-membered heterocyclic) C_2-C_6 alkenyl, (4- to 10-membered heterocyclic) C_2-C_6 alkynyl, (C_6-C_{10} aryl) C_1-C_6 alkyl, (C_6-C_{10} aryl) C_2-C_6 alkenyl, and (C_6-C_{10} aryl) C_2-C_6 alkynyl wherein said alkyl moieties of

the foregoing groups are optionally substituted by halo or C_1-C_6 alkyl, and wherein said heterocyclic moieties are optionally substituted by 4- to 10-membered heterocyclic, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, or (C_6-C_{10} aryl) C_1-C_6 alkyl, and further wherein the aryl and heterocyclic moieties of each of the foregoing groups and optional substituents is optionally substituted by 1 to 4 R^7 groups;

R^4 is selected from the group consisting of H, C_1-C_{10} alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, (C_1-C_6 alkoxy) C_1-C_6 alkyl, (C_1-C_6 alkylthio) C_1-C_6 alkyl, (C_5-C_8 cycloalkyl) C_2-C_5 alpha branched alkyl, C_3-C_8 cycloalkyl, C_5-C_8 cycloalkenyl, 3 to 6 membered O or S containing heterocyclic group, or phenyl, wherein each R^4 group may be substituted with from 1 to 3 substituents independently selected from the group consisting of hydroxy, halo, (C_6-C_{10} aryl) C_2-C_6 alkenyl, and C_1-C_4 alkyl;

R^5 and R^{10} are independently selected from the group consisting of H, C_1-C_6 alkyl, C_6-C_{10} aryl, 4- to 10-membered heterocyclic, (4- to 10-membered heterocyclic) C_1-C_6 alkyl and (C_6-C_{10} aryl) C_1-C_6 alkyl, wherein said aryl and heterocyclic groups are optionally substituted by 1 to 4 R^7 groups;

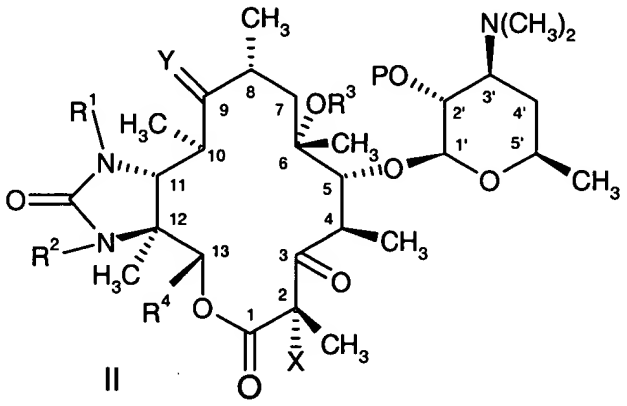
R^6 is H, -C(O)C_1-C_6 alkyl, benzyl, benzyloxycarbonyl, or (C_1-C_6 alkyl)$_3$ silyl;

R^7 is independently selected from the group consisting of halo, cyano, nitro, trifluoromethyl, trifluoromethoxy, azido, -C(O)R^8, -C(O)OR^8, -OC(O)R^8, -NR^8C(O)R^9, -C(O)NR^8R^9, -NR^8R^9, hydroxy, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_6-C_{10} aryl, 4- to 10-

membered heterocyclic, and C_1-C_6 alkoxy; and

each R^8 and R^9 is independently selected from the group consisting of H, C_1-C_6 alkyl, C_6-C_{10} aryl, and 4- to 10-membered heterocyclic;

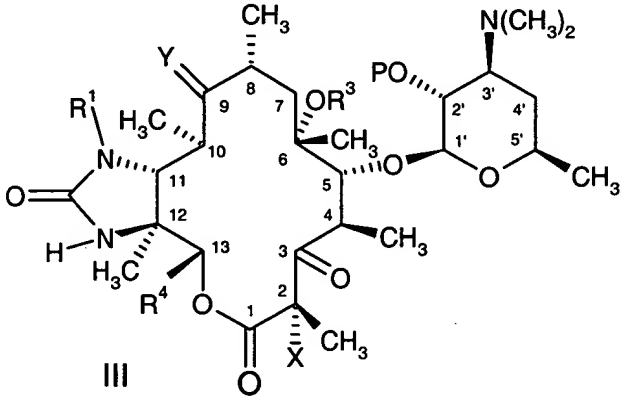
which comprises deprotecting a compound of the formula



II

wherein P is a protecting group.

8(once amended). The method of claim 0 further wherein the compound of formula II is prepared by treating a compound of the formula



III

with a strong base and a compound of formula R^2-L, where L is a leaving group, and wherein R^2 is selected from the group consisting of H, C_1-C_{10} alkyl, C_2-C_{10} alkenyl, C_2-C_{10} alkynyl, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, (4- to 10-membered

heterocyclic) C_2-C_6 alkenyl, (4- to 10-membered heterocyclic) C_2-C_6 alkynyl, (C_6-C_{10} aryl) C_1-C_6 alkyl, (C_6-C_{10} aryl) C_2-C_6 alkenyl, and (C_6-C_{10} aryl) C_2-C_6 alkynyl wherein said alkyl moieties of the foregoing groups are optionally substituted by halo or C_1-C_6 alkyl, and wherein said heterocyclic moieties are optionally substituted by 4- to 10-membered heterocyclic, (4- to 10-membered heterocyclic) C_1-C_6 alkyl, or (C_6-C_{10} aryl) C_1-C_6 alkyl, and further wherein the aryl and heterocyclic moieties of each of the foregoing groups and optional substituents is optionally substituted by 1 to 4 R^7 groups.